Index of Authors

Ababouch, L. H., Grimit, L., Eddafry, R. & Busta, F. F. Thermal inactivation kinetics of *Bacillus subtilis* spores suspended in buffer and in oils 669

Abraham, G. *see* Rai, A. K.

Abreu da Silva, A. *see* Carlin, F.

Ahola-Luttila, H. *see* Korhonen, H.

Al-Hasan, R. H. *see* Sorkhoh, N. A.

Albasheri, K. A. & Mitchell, W. J. Identification of two α-glucosidase activities in *Clostridium acetobutylicum* NCIB 8052 149

Albesa, I., Bogdanov, P., Eraso, A., Sperandeo, N. R. & de Bertorello, M. M. Antibiotic activity of isoxazolylnaphthoquinone imines on mice infected with *Staphylococcus aureus* 373

Alkorta, F. *see* Amarita, F.

Allison, N. *see* Turner, J. E.

Allman, R. *see* Mason, D. J.

Amarita, F., Alkorta, F., Lescan du Plessix, M., Cantabrana, T. & Rodriguez-Fernandez, C. Isolation and properties of free and immobilized β-galactosidase from the psychrotrophic enterobacterium *Buttiauxella agrestis* (strain NC4) 630

Amaro, C. *see* Esteve, C.

Andrew, P. W. *see* Jones, C. E.

Anthony, R. M. *see* Bond, R.

Apte, S. C. *see* Davies, C. M.

Arias, J. M. *see* Farez-Vidal, M. E.

Armstead, I. P. *see* Ling, J. R.

Arnaud, A. *see* Gueguen, Y.

Arques, J. *see* Casanovas, L.

Arroyo, G. & Arroyo, J. A. Selective action of inhibitors used in different culture media on the competitive microflora of *Salmonella* 281

Arroyo, J. A. *see* Arroyo, G.

Ashbell, G. *see* Weinberg, Z. G.

Atrih, A. *see* Rekhif, N.

Azrieli, A. *see* Weinberg, Z. G.

Baigori, M. D. *see* Breccia, J. D.

Baleiras Couto, M. M. & Huis in't Veld, J. H. J. Influence of ethanol and temperature on the cellular fatty acid composition of *Zygosaccharomyces bailii* spoilage yeasts 327

Beacham, I. R. *see* McKay, D. B.

Benthin, S. & Villadsen, J. Different inhibition of *Lactobacillus delbrueckii* subsp. *bulgaricus* by D- and L-lactic acid: effects on lag phase, growth rate and cell yield 647

Bernardo, A. *see* Gonzalez, I.

Beuchat, L. R. *see* Patel, J. R.

Billcliffe, B. *see* Hay, J.

Blondelle, S. E., Takahashi, E., Kim Thy Dinh & Houghten, R. A. The antimicrobial activity of hexapeptides derived from synthetic combinatorial libraries 39

Bogdanov, P. *see* Albesa, I.

Bolsen, K. K. *see* Weinberg, Z. G.

Bond, R. & Anthony, R. M. Characterization of markedly lipid-dependent *Malassezia pachydermatis* from healthy dogs 537

Breccia, J. D., Castro, G. R., Baigori, M. D. & Sineriz, F. Screening of xylanolytic bacteria using a colour plate method 469

Brocklehurst, T. F. *see* Parker, M. L.

Brocklehurst, T. F., Mitchell, G. A., Pleass, W. & Smith, A. C. The effect of step changes in sucrose concentration on the growth of *Salmonella typhimurium* LT2

Brocklehurst, T. F., Parker, M. L., Gunning, P. A., Coleman, H. P. & Robins, M. M. Growth of food-borne pathogenic bacteria in oil-in-water emulsions: II—Effect of emulsion structure on growth parameters and form of growth 609

Brydon, L. *see* Molloy, P.

Burnell, A. M. *see* Jackson, T. J.

Burns, T. *see* Wilson, M.

Busta, F. F. *see* Ababouch, L. H.

Cambra, M. *see* Hyman, L. J.

Cantabrana, T. *see* Amarita, F.

Carlin, F., Nguyen-the, C. & Abreu da Silva, A. Factors affecting the growth of *Listeria monocytogenes* on minimally processed fresh endive 636

Carson, C. F. & Riley, T. V. Antimicrobial activity of the major components of the essential oil of *Melaleuca alternifolia* 264

Casanovas, L., de Simon, M., Ferrer, M. D., Arques, J. & Monzon, G. Intestinal carriage of campylobacters, salmonellas, yersinias and listerias in pigeons in the city of Barcelona 11

Casas, C. *see* Pin, C.

Casaus, P. *see* Rodriguez, J. M.

Castro, G. R. *see* Breccia, J. D.

Castro, H. *see* Teixeira, P.

Chaffey, B. J. *see* Stringer, S. C.

Chapman, J. S. & Diehl, M. A. Methylchloroisothiazolone-induced growth inhibition and lethality in *Escherichia coli* 134

Chaturvedi, P. *see* Gupta, R.

Chemardin, P. *see* Gueguen, Y.

Chidburee, S. *see* Leifert, C.

Chowdhury, I. *see* Watier, D.

Christensen, H. *see* Rasmussen, H. N.

Cintas, L. M. *see* Rodriguez, J. M.

Coleman, H. P. *see* Brocklehurst, T. F.

Coleman, H. P. *see* Parker, M. L.
Coopman, R. *see* Huys, G.
Coroler, L. *see* Elomari, M.
Corrier, D. E. *see* Hume, M. E.
Davies, C. M., Apte, S. C. & Peterson, S. M. Possible interference of lactose-fermenting marine vibrios in coliform β-D-galactosidase assays 387
Dawson, H. M. *see* Wyer, M. D.
de Bertorello, M. M. *see* Albesa, I.
de Kairuz, M. N. *see* Vignolo, G. M.
de Reu, J. C., Rombouts, F. M. & Nout, M. J. R. Influence of acidity and initial substrate temperature on germination of *Rhizopus oligosporus* sporangiospores during tempe manufacture 200
de Ruiz Holgado, A. P. *see* Vignolo, G. M. *also* Fernandez Murga, M. L.
de Simon, M. *see* Casanovas, L.
de Valdez, G. F. *see* Fernandez Murga, M. L.
de Vuyst, L. Nutritional factors affecting nisin production by *Lactococcus lactis* subsp. *lactis* NIZO 22186 in a synthetic medium 28
DeLoach, J. R. *see* Hume, M. E.
Dieckelmann, M. *see* McKay, D. B.
Diehl, M. A. *see* Chapman, J. S.
Dodd, C. E. R. *see* Stringer, S. C.
Dodd, H. M. *see* Rodriguez, J. M.
Dowds, B. C. A. *see* Jackson, T. J.
Drosinos, E. H. *see* Tassou, C. C.
Dubourguier, H. C. *see* Watier, D.
Duffner, F. & O'Connell, M. Comparative evaluation of plasmid profiling and ribotyping in the analysis of *Lactobacillus plantarum* strain heterogeneity in silage 20
Eddafry, R. *see* Ababouch, L. H.
Elomari, M., Coroler, L., Izard, D. & Leclerc, H. A numerical taxonomic study of fluorescent *Pseudomonas* strains isolated from natural mineral waters 71
Endo, T. *see* Kanazawa, A.
Epton, H. A. S. *see* Leifert, C.
Eraso, A. *see* Albesa, I.
Escudero, J. *see* Lambrechts, C.
Esteve, C., Amaro, C., Garay, E., Santos, Y. & Toranzo, A. E. Pathogenicity of live bacteria and extracellular products of motile *Aeromonas* isolated from eel 555
Farez-Vidal, M. E., Fernandez-Vivas, A., Gonzalez, F. & Arias, J. M. Properties and significance of an α-amylase produced by *Myxococcus coralloides* D 14
Fernandez Murga, M. L., de Ruiz Holgado, A. P. & de Valdez, G. F. Influence of the incubation temperature on the autolytic activity of *Lactobacillus acidophilus* 426
Fernandez, J. L. & Simpson, W. J. Measurement and prediction of the susceptibility of lager beer to spoilage by lactic acid bacteria 419
Fernandez-Vivas, A. *see* Farez-Vidal, M. E.
Ferrer, M. D. *see* Casanovas, L.
Fett, W. F. *see* Roberts, C. M.
Fiedurek, J., Szczodrak, J. & Rogalski, J. Seeds as natural matrices for immobilization of *Aspergillus niger* mycelium producing pectinases 409
Flandrois, J.-P. *see* Guerin-Faublee, V.
Flint, H. J. *see* Scott, K. P.
Forsythe, S. J. *see* Safarik, I.
Freer, J. H. *see* Hay, J.
Frost, J. A. *see* Hampton, M. D.
Fujisawa, T., Namba, K., Hirayama, K., Lee, W. K. & Mitsuoka, T. New selective media for isolation of clostridia from faecal specimens 481
Galzy, P. *see* Gueguen, Y. *also* Lambrechts, C.
Garay, E. *see* Esteve, C.
Garcia Lopez, M. L. *see* Prieto, M.
Garcia, M. L. *see* Pin, C.
Garcia-Armesto, M. R. *see* Prieto, M.
Gasson, M. J. *see* Rodriguez, J. M.
Gill, T. *see* Johansen, C.
Gonzalez, C. *see* Prieto, M.
Gonzalez, F. *see* Farez-Vidal, M. E.
Gonzalez, I., Lopez, M., Mazas, M., Gonzalez, J. & Bernardo, A. The effect of recovery conditions on the apparent heat resistance of *Bacillus cereus* spores 548
Gonzalez, J. *see* Gonzalez, I.
Gonzalez-Lopez, J. *see* Martinez-Toledo, M. V.
Goodacre, R. *see* Manchester, L. N.
Gorris, M. T. *see* Hyman, L. J.
Gram, L. *see* Johansen, C.
Grbic-Galic, D. *see* Hrsak, D.
Griffin, C. T. *see* Jackson, T. J.
Grimit, L. *see* Ababouch, L. H.
Gueguen, Y., Chemardin, P., Arnaud, A. & Galzy, P. Comparative study of extracellular and intracellular β-glucosidases of a new strain of *Zygosaccharomyces bailii* isolated from fermenting agave juice 270
Guerin-Faublee, V., Rosso, L., Vigneulle, M. & Flandrois, J.-P. The effect of incubation temperature and sodium chloride concentration on the growth kinetics of *Vibrio anguillarum* and *Vibrio anguillarum*-related organisms 621
Gunning, P. A. *see* Brocklehurst, T. F. *also* Parker, M. L.
Gupta, R., Saxena, R. K., Chaturvedi, P. & Virdi, J. S. Chitinase production by *Streptomyces viridificans*: its potential in fungal cell wall lysis 378
Hampson, S. *see* Leifert, C.
Hampton, M. D., Threlfall, E. J., Frost, J. A., Ward, L. R. & Rowe, B. *Salmonella typhimurium* DT 193:

differentiation of an epidemic phage type by antibiogram, plasmid profile, plasmid fingerprint and salmonella plasmid virulence (spv) gene probe 402
Harbour, A. *see* Leifert, C.
Harris, W. J. *see* Molloy, P.
Harty, D. W. S. *see* Oakey, H. J.
Hay, J., Seal, D. V., Billcliffe, B. & Freer, J. H. Non-culturable *Legionella pneumophila* associated with *Acanthamoeba castellanii*: detection of the bacterium using DNA amplification and hybridization 61
Hen, Y. *see* Weinberg, Z. G.
Henick-Kling, T. *see* Martineau, B.
Hernandez, P. E. *see* Rodriguez, J. M.
Hirayama, K. *see* Fujisawa, T.
Hofstra, H. *see* Le Jeune, C.
Hoggarth, J. H. & Ritchie, D. A. Expression of novobiocin resistance genes in the novobiocin-producing organism *Streptomyces niveus* 543
Hoover, D. G. *see* Roberts, C. M.
Horn, N. *see* Rodriguez, J. M.
Hornez, J. P. *see* Watier, D.
Houghten, R. A. *see* Blondelle, S. E.
Hrsak, D. & Grbic-Galic, D. Biodegradation of linear alkylbenzenesulphonates (LAS) by mixed methanotrophic-heterotrophic cultures 487
Hudson, W. R. *see* Miles, C. A.
Huis in't Veld, J. H. J. *see* Baleiras Couto, M. M.
Hume, M. E., Nisbet, D. J., Scanlan, C. M., Corrier, D. E. & DeLoach, J. R. Fermentation of radiolabelled substrates by batch cultures of caecal microflora maintained in a continuous-flow culture 677
Husu, J. *see* Korhonen, H.
Huys, G., Kersters, I., Vancanneyt, M., Coopman, R., Janssen, P. & Kersters, K. Diversity of *Aeromonas* sp. in Flemish drinking water production plants as determined by gas-liquid chromatographic analysis of cellular fatty acid methyl esters (FAMEs) 445
Hyman, L. J., Wallace, A., Lopez, M. M., Cambra, M., Gorris, M. T. & Perombelon, M. C. M. Characterization of monoclonal antibodies against *Erwinia carotovora* subsp. *atroseptica* serogroup I: specificity and epitope analysis 437
Iivanainen, E. Isolation of mycobacteria from acidic forest soil samples: comparison of culture methods 663
Ikeda, T. *see* Kanazawa, A.
Izard, D. *see* Elomari, M.
Jackson, G. F. *see* Wyer, M. D.
Jackson, T. J., Wang, H., Nugent, M. J., Griffin, C. T., Burnell, A. M. & Dowds, B. C. A. Isolation of insect pathogenic bacteria, *Providencia rettgeri*, from *Heterorhabditis* spp. 237
Janssen, P. *see* Huys, G.
Johansen, C., Gill, T. & Gram, L. Antibacterial effect of protamine assayed by impedimetry 297
Jones, C. E., Shama, G., Andrew, P. W., Roberts, I. S. & Jones, D. Comparative study of the growth of *Listeria monocytogenes* in defined media and demonstration of growth in continuous culture 66
Jones, D. *see* Jones, C. E.
Kalantzopoulos, G. *see* Samelis, J.
Kalathenos, P., Sutherland, J. P. & Roberts, T. A. Resistance of some wine spoilage yeasts to combinations of ethanol and acids present in wine 245
Kanazawa, A., Ikeda, T. & Endo, T. A novel approach to mode of action of cationic biocides: morphological effect of antibacterial activity 55
Kay, D. *see* Wyer, M. D.
Kersters, I. *see* Huys, G.
Kersters, K. *see* Huys, G.
Khanafer, M. *see* Sorkhoh, N. A.
Kim Thy Dinh *see* Blondelle, S. E.
King, T. P. *see* Richards, R. M. E.
Kirby, R. *see* Teixeira, P.
Knox, K. W. *see* Oakey, H. J.
Kopola, S. *see* Korhonen, H.
Korhonen, H., Syvaoja, E.-L., Ahola-Luttila, H., Sivela, S., Kopola, S., Husu, J. & Kosunen, T. U. Bactericidal effect of bovine normal and immune serum, colostrum and milk against *Helicobacter pylori* 655
Kosunen, T. U. *see* Korhonen, H.
Kulkarni, P. R. *see* Viswanathan, P.
Lambrechts, C., Escudero, J. & Galzy, P. Purification and properties of three esterases from *Brevibacterium* sp. R312 180
Le Jeune, C., Lonvaud-Funel, A., ten Brink, B., Hofstra, H. & van der Vossen, J. M. B. M. Development of a detection system for histidine decarboxylating lactic acid bacteria based on DNA probes, PCR and activity test 316
Leclerc, H. *see* Elomari, M.
Lee, W. K. *see* Fujisawa, T.
Lefebvre, G. *see* Rekhif, N.
Leguerinel, I. *see* Watier, D.
Leifert, C., Li, H., Chidburee, S., Hampson, S., Workman, S., Sigee, D., Epton, H. A. S. & Harbour, A. Antibiotic production and biocontrol activity by *Bacillus subtilis* CL27 and *Bacillus pumilus* CL45 97
Lemercier, B. *see* Rawadi, G.
Lescan du Plessix, M. *see* Amarita, F.
Li, H. *see* Leifert, C.
Lin, C.-K. & Tsen, H.-Y. Development and evaluation of two novel oligonucleotide probes based on 16S rRNA

sequence for the identification of *Salmonella* in foods 507
Ling, J. R. & Armstead, I. P. The *in vitro* uptake and metabolism of peptides and amino acids by five species of rumen bacteria 116
Lloyd, D. *see* Mason, D. J.
Lonvaud-Funel, A. *see* Le Jeune, C.
Lopez, M. *see* Gonzalez, I.
Lopez, M. M. *see* Hyman, L. J.
Lopez-Amoros, R. *see* Mason, D. J.
Mackey, B. M. *see* Miles, C. A.
Mafart, P. Modelling germination kinetics of spores of *Clostridium tyrobutyricum*: a tool for predictive microbiology 477
Manca de Nadra, M. C. *see* Rodriguez, A. V. *also* Strasser de Saad, A. M.
Manchester, L. N., Toole, A. & Goodacre, R. Characterization of *Carnobacterium* species by pyrolysis mass spectrometry 88
Marin, M. L. *see* Pin, C.
Martineau, B. & Henick-Kling, T. Performance and diacetyl production of commercial strains of malolactic bacteria in wine 526
Martinez-Toledo, M. V., Gonzalez-Lopez, J., Rodelas, B., Pozo, C. & Salmeron, V. Production of poly-β-hydroxybutyrate by *Azotobacter chroococcum* H23 in chemically defined medium and alpechin medium 413
Mason, D. J., Lopez-Amoros, R., Allman, R., Stark, J. M. & Lloyd, D. The ability of membrane potential dyes and calcafluor white to distinguish between viable and non-viable bacteria 309
Mazas, M. *see* Gonzalez, I.
McKay, D. B., Dieckelmann, M. & Beacham, I. R. Degradation of triglycerides by pseudomonad isolated from milk: the roles of lipase and esterase studied using recombinant strains over-producing, or specifically deficient in these enzymes 216
Meola, E. *see* Piva, A.
Metaxopoulos, J. *see* Samelis, J.
Miles, C. A., Morley, M. J., Hudson, W. R. & Mackey, B. M. Principles of separating micro-organisms from suspensions using ultrasound 47
Mitchell, G. A. *see* Brocklehurst, T. F.
Mitchell, W. J. *see* Albasheri, K. A.
Mitsuoka, T. *see* Fujisawa, T.
Molloy, P., Brydon, L., Porter, A. J. & Harris, W. J. Separation and concentration of bacteria with immobilized antibody fragments 359
Montuschi, c. *see* Suzzi, G.
Monzon, G. *see* Casanovas, L.
Morgan, M. R. A. *see* Stringer, S. C.
Morley, M. J. *see* Miles, C. A.
Mortimer, R. *see* Romano, P.
Muller, M. & Steller, J. Comparative studies of the degradation of grass fructan and inulin by strains of *Lactobacillus paracasei* subsp. *paracasei* and *Lactobacillus plantarum* 229
Namba, K. *see* Fujisawa, T.
Nguyen-the, C. *see* Carlin, F.
Nisbet, D. J. *see* Hume, M. E.
Nout, M. J. R. *see* de Reu, J. C.
Nugent, M. J. *see* Jackson, T. J.
Nychas, G. J. E. *see* Tassou, C. C.
O'Connell, M. *see* Duffner, F.
O'Connor, J. V. *see* Roberts, C. M.
Oakey, H. J., Harty, D. W. S. & Knox, K. W. Enzyme production by lactobacilli and the potential link with infective endocarditis 142
Oliver, G. *see* Vignolo, G. M.
Olsen, J. E. *see* Rasmussen, H. N.
Osman, S. F. *see* Roberts, C. M.
Otero, A. *see* Prieto, M.
Pahlow, G. *see* Weinberg, Z. G.
Panciroli, A. *see* Piva, A.
Parker, M. L. *see* Brocklehurst, T. F.
Parker, M. L., Brocklehurst, T. F., Gunning, P. A., Coleman, H. P. & Robins, M. M. Growth of food-borne pathogenic bacteria in oil-in-water emulsions: I—Methods for investigating the form of growth 601
Pasteris, S. E. *see* Strasser de Saad, A. M.
Patel, J. R. & Beuchat, L. R. Evaluation of enrichment broths for their ability to recover heat-injured *Listeria monocytogenes* 366
Pearson, G. J. *see* Wilson, M.
Perombelon, M. C. M. *see* Hyman, L. J.
Peterson, S. M. *see* Davies, C. M.
Pin, C., Marin, M. L., Selgas, D., Garcia, M. L., Tormo, J. & Casas, C. Differences in production of several extracellular virulence factors in clinical and food *Aeromonas* spp. strains 175
Piva, A., Meola, E. & Panciroli, A. Effect of *Pediococcus pentosaceus* FBB61, pediocin A producer strain, in caecal fermentations 616
Pleass, W. *see* Brocklehurst, T. F.
Polsinelli, M. *see* Romano, P.
Ponti, I. *see* Suzzi, G.
Poon, A. *see* Saucier, L.
Porter, A. J. *see* Molloy, P.
Pozo, C. *see* Martinez-Toledo, M. V.
Pratten, J. *see* Wilson, M.
Prieto, M., Garcia-Armesto, M. R., Gonzalez, C., Otero, A. & Garcia Lopez, M. L. Numerical characterization study of Micrococcaceae associated with lamb spoilage

251
Radwan, S. S. *see* Sorkhoh, N. A.
Rai, A. K. & Abraham, G. Relationship of combined nitrogen sources to salt tolerance in freshwater cyanobacterium *Anabaena doliolum* 501
Rasmussen, H. N., Rasmussen, O. F., Christensen, H. & Olsen, J. E. Detection of *Yersinia enterocolitica* O : 3 in faecal samples and tonsil swabs from pigs using IMS and PCR 563
Rasmussen, O. F. *see* Rasmussen, H. N.
Rawadi, G., Lemercier, B. & Roulland-Dussoix, D. Application of an arbitrarily-primed polymerase chain reaction to mycoplasma identification and typing within the *Mycoplasma mycoides* cluster 586
Rekhif, N., Atrih, A. & Lefebvre, G. Activity of plantaricin SA6, a bacteriocin produced by *Lactobacillus plantarum* SA6 isolated from fermented sausage 349
Richards, R. M. E., Xing, D. K. L. & King, T. P. Activity of *p*-aminobenzoic acid compared with other organic acids against selected bacteria 209
Riley, T. V. *see* Carson, C. F.
Ritchie, D. A. *see* Hoggarth, J. H.
Roberts, C. M., Fett, W. F., Osman, S. F., Wijey, C., O'Connor, J. V. & Hoover, D. G. Exopolysaccharide production by *Bifidobacterium longum* BB-79 463
Roberts, I. S. *see* Jones, C. E.
Roberts, T. A. *see* Kalathenos, P.
Robertson, L. J. *see* Whitmore, T. N.
Robins, M. M. *see* Brocklehurst, T. F. *also* Parker, M. L.
Rodelas, B. *see* Martinez-Toledo, M. V.
Rodriguez, A. V. & Manca de Nadra, M. C. Mixed culture of *Lactobacillus hilgardii* and *Leuconostoc oenos* isolated from Argentine wine 521
Rodriguez, J. M., Cintas, L. M., Casaus, P., Horn, N., Dodd, H. M., Hernandez, P. E. & Gasson, M. J. isolation of nisin-producing *Lactococcus lactis* strains from dry fermented sausages 109
Rodriguez-Fernandez, C. *see* Amarita, F.
Rogalski, J. *see* Fiedurek, J.
Romano, P. *see* Suzzi, G.
Romano, P., Suzzi, G., Mortimer, R. & Polsinelli, M. Production of high levels of acetoin in *Saccharomyces cerevisiae* wine yeasts is a recessive trait 169
Rombouts, F. M. *see* de Reu, J. C.
Rosso, L. *see* Guerin-Faublee, V.
Roulland-Dussoix, D. *see* Rawadi, G.
Rowe, B. *see* Hampton, M. D.
Safarik, I., Safarikova, M. & Forsythe, S. J. A Review: The application of magnetic separations in applied microbiology 575
Safarikova, M. *see* Safarik, I.
Salmeron, V. *see* Martinez-Toledo, M. V.
Samelis, J., Tsakalidou, E., Metaxopoulos, J. & Kalantzopoulos, G. Differentiation of *Lactobacillus sake* and *Lact. curvatus* isolated from naturally fermented Greek dry salami by SDS-PAGE of whole-cell proteins 157
Santos, Y. *see* Esteve, C.
Saucier, L., Poon, A. & Stiles, M. E. Induction of bacteriocin in *Carnobacterium piscicola* LV17 684
Saxena, R. K. *see* Gupta, R.
Scanlan, C. M. *see* Hume, M. E.
Scott, K. P. & Flint, H. J. Transfer of plasmids between strains of *Escherichia coli* under rumen conditions 189
Seal, D. V. *see* Hay, J.
Selgas, D. *see* Pin, C.
Shama, G. *see* Jones, C. E.
Sigee, D. *see* Leifert, C.
Simpson, W. J. *see* Fernandez, J. L.
Sineriz, F. *see* Breccia, J. D.
Sivela, S. *see* Korhonen, H.
Smith, A. C. *see* Brocklehurst, T. F.
Sorkhoh, N. A., Al-Hasan, R. H., Khanafer, M. & Radwan, S. S. Establishment of oil-degrading bacteria associated with cyanobacteria in oil-polluted soil 194
Sperandeo, N. R. *see* Albesa, I.
Stark, J. M. *see* Mason, D. J.
Stead, D. The effect of hydroxycinnamic acids and potassium sorbate on the growth of 11 strains of spoilage yeasts 82
Steller, J. *see* Muller, M.
Stiles, M. E. *see* Saucier, L.
Strasser de Saad, A. M., Pasteris, S. E. & Manca de Nadra, M. C. Production and stability of pediocin N5p in grape juice medium 473
Stringer, S. C., Chaffey, B. J., Dodd, C. E. R., Morgan, M. R. A. & Waites, W. M. Specific antibody-mediated detection of *Brochothrix thermosphacta in situ* in British fresh sausage 335
Stringer, S. C., Dodd, C. E. R., Morgan, M. R. A. & Waites, W. M. Locating nisin-producing *Lactococcus lactis* in a fermented meat system 341
Sutherland, J. P. *see* Kalathenos, P.
Suzzi, G. *see* Romano, P.
Suzzi, G., Romano, P., Ponti, I. & Montuschi, C. Natural wine yeasts as biocontrol agents 304
Syvaoja, E.-L. *see* Korhonen, H.
Szczodrak, J. *see* Fiedurek, J.
Takahashi, E. *see* Blondelle, S. E.
Tanguy, L. *see* Wyer, M. D.
Tassou, C. C., Drosinos, E. H. & Nychas, G. J. E. Effects

of essential oil from mint (*Mentha piperita*) on *Salmonella enteritidis* and *Listeria monocytogenes* in model food systems at 4° and 10°C 593
Teixeira, P., Castro, H. & Kirby, R. Spray drying as a method for preparing concentrated cultures of *Lactobacillus bulgaricus* 456
ten Brink, B. *see* Le Jeune, C.
Threlfall, E. J. *see* Hampton, M. D.
Toole, A. *see* Manchester, L. N.
Toora, S. Partial purification and characterization of bacteriocin from *Yersinia kristensenii* 224
Toranzo, A. E. *see* Esteve, C.
Tormo, J. *see* Pin, C.
Tsakalidou, E. *see* Samelis, J.
Tsen, H.-Y. *see* Lin, C.-K.
Turner, J. E. & Allison, N. Degradation of methoxylated aromatic acids by *Pseudomonas putida* 125
van der Vossen, J. M. B. M. *see* Le Jeune, C.
Vancanneyt, M. *see* Huys, G.
Vigneulle, M. *see* Guerin-Faublee, V.
Vignolo, G. M., de Kairuz, M. N., de Ruiz Holgado, A. A. P. & Oliver, G. Influence of growth conditions on the production of lactocin 705, a bacteriocin produced by *Lactobacillus casei* CRL 705 5
Villadsen, J. *see* Benthin, S.
Virdi, J. S. *see* Gupta, R.
Viswanathan, P. & Kulkarni, P. R. Enhancement of inulinase production by *Aspergillus niger* van Teighem 384
Wade, W. G. *see* Wilson, M. J.
Waites, W. M. *see* Stringer, S. C.
Wallace, A. *see* Hyman, L. J.
Wang, H. *see* Jackson, T. J.
Ward, L. R. *see* Hampton, M. D.
Watier, D., Leguerinel, I., Hornez, J. P., Chowdhury, I. & Dubourguier, H. C. Heat resistance of *Pectinatus* sp., a beer spoilage anaerobic bacterium 164
Weightman, A. J. *see* Wilson, M. J.
Weinberg, Z. G., Ashbell, G., Bolson, K. K., Pahlow, G., Hen, Y. & Azrieli, A. The effect of a propionic acid bacterial inoculant applied at ensiling, with or without lactic acid bacteria, on the aerobic stability of pearl millet and maize silages 430
Whitmore, T. N. & Robertson, L. J. The effect of sewage sludge treatment processes on oocysts of *Cryptosporidium parvum* 34
Wijey, C. *see* Roberts, C. M.
Wilson, M., Burns, T., Pratten, J. & Pearson, G. J. Bacteria in supragingival plaque samples can be killed by low-power laser light in the presence of a photosensitizer 569
Wilson, M. J., Wade, W. G. & Weightman, A. J. Restriction fragment length polymorphism analysis of PCR-amplified 16S ribosomal DNA of human *Capnocytophaga* 394
Workman, S. *see* Leifert, C.
Wyer, M. D., Kay, D., Jackson, G. F., Dawson, H. M., Yeo, J. & Tanguy, L. Indicator organism sources and coastal water quality: a catchment study on the Island of Jersey 290
Xing, D. K. L. *see* Richards, R. M. E.
Yeo, J. *see* Wyer, M. D.

Index of Subjects

Activity of plantaricin SA6 from *Lactobacillus plantarum* (Rekhif, Atrih & Lefebvre) 349

Aeromonas diversity in drinking water production plants (Huys, Kersters, Vancanneyt, Coopman, Janssen & Kersters) 445

Alpha-amylase from *Myxococcus coralloides* D (Farez-Vidal, Fernandez-Vivas, Gonzalez & Arias) 14

Alpha-glucosidases in *Clostridium acetobutylicum* (Albasheri & Mitchell) 149

Antibacterial effect of *p*-aminobenzoic acid (Richards, Xing & King) 209

Antibacterial effect of protamine assayed by impedimetry (Johansen, Gill & Gram) 297

Antibiotic activity of isoxazolylnaphthoquinone imines (Albesa, Bogdanov, Eraso, Sperandeo & de Bertorello) 373

Antibiotics of biocontrol *Bacillus subtilis* and *Bacillus pumilus* (Leifert, Li, Chidburee, Hampson, Workman, Sigee, Epton & Harbour) 97

Antimicrobial hexapeptides derived from synthetic combinatorial libraries (Blondelle, Takahashi, Dinh & Houghten) 39

Application of magnetic separations in applied microbiology (Safarik, Safarikova & Forsythe) 575

Aspergillus niger mycelium producing pectinases (Fiedurek, Szczodrak & Rogalski) 409

Autolytic activity of *Lactobacillus acidophilus* (Fernandez Murga, de Ruiz Holgado & de Valdez) 426

Bacteria in oil-in-water emulsions I (Parker, Brocklehurst, Gunning, Coleman & Robins) 601

Bacteria in oil-in-water emulsions II (Brocklehurst, Parker, Gunning, Coleman & Robins) 609

Bactericidal activity against *Helicobacter pylori* (Korhonen, Syvaoja, Ahola-Luttila, Sivela, Kopola, Husu & Kosunen) 655

Bacteriocin from *Yersinia kristensenii* (Toora) 224

Bacteriocin induction of *Carnobacterium piscicola* LV17 (Saucier, Poon & Stiles) 684

Beta-glycosidases of a new strain of *Zygosaccharomyces bailii* (Gueguen, Chemardin, Arnaud & Galzy) 270

Biological control with wine yeasts (Suzzi, Romano, Ponti & Montuschi) 304

Chitinase production by *Streptomyces viridificans* (Gupta, Saxena, Chaturvedi & Virdi) 378

Commercial strains of malolactic bacteria in wine (Martineau & Henick-Kling) 526

Components of essential oil of *Melaleuca alternifolia* (Carson & Riley) 264

Defined media for *Listeria monocytogenes* (Jones, Shama, Andrew, Roberts & Jones) 66

Degradation of methoxylated aromatic acids by *Pseudomonas putida* (Turner & Allison) 125

Detection of histamine-producing lactic acid bacteria (Le Jeune, Lonvaud-Funel, ten Brink, Hofstra & van der Vossen) 316

Detection of non-culturable *Legionella pneumophila* associated with *Acanthamoeba castellanii* (Hay, Seal, Billcliffe & Freer) 61

Differentiation of *Salm. typhimurium* DT 193 (Hampton, Threlfall, Frost, Ward & Rowe) 402

Dyes and calcafluor white to distinguish between viable and non-viable bacteria (Mason, Lopez-Amoros, Allman, Stark & Lloyd) 309

Effect of sewage sludge treatment on *Cryptosporidium parvum* (Whitmore & Robertson) 34

Effect of stress factors on *Zygosaccharomyces bailii* (Baleiras Couto & Huis in't Veld) 327

Esterases of *Brevibacterium* sp. R312 (Lambrechts, Escudero & Galzy) 180

Exopolysaccharide production by *Bifidobacterium longum* BB-79 (Roberts, Fett, Osman, Wijey, O'Connor & Hoover) 463

Fermentation of radiolabelled substrates by caecal bacteria (Hume, Nisbet, Scanlan, Corrier & DeLoach) 677

Free and immobilized lactase from *Buttiauxella agrestis* (Amarita, Alkorta, Lescan du Plessix, Cantabrana & Rodriguez-Fernandez) 630

Genetics of acetoin production (Romano, Suzzi, Mortimer & Polsinelli) 169

Germination of *Rhizopus oligosporus* sporangiospores during tempe manufacture (de Reu, Rombouts & Nout) 200

Growth inhibition and lethality in *Escherichia coli* (Chapman & Diehl) 134

Growth of *Listeria monocytogenes* on endive (Carlin, Nguyen-the & Usan) 636

Heat resistance of *Pectinatus* sp., a spoilage anaerobic bacterium (Watier, Leguerinel, Hornez, Chowdhury & Dubourguier) 164

Hydroxycinnamic acids and potassium sorbate in growth of spoilage yeasts (Stead) 82

IMS-PCR to detect *Yersinia enterocolitica* in faecal samples (Rasmussen, Rasmussen, Christensen & Olsen) 563

Indicator organism sources and coastal water quality (Wyer, Kay, Jackson, Dawson, Yeo & Tanguy) 290

Inhibition by D- and L-lactic acids (Benthin & Villadsen) 647

Inhibitor action in culture media on competitive *Salmonella microflora* (Arroyo & Arroyo) 281

Inhibitory effect of essential oil from mint (Tassou, Drosinos & Nychas) 593

Insect pathogenic bacteria, *Providencia rettgeri*, from *Heterorhabditis* spp. (Jackson, Wang, Nugent, Griffin, Burnell & Dowds) 237

Intestinal carriage of *Salmonella* and *Campylobacter* in pigeons (Casanovas, de Simon, Ferrer, Arques and Monzon) 11

Inulinase produced by *Aspergillus niger* van Teighem (Viswanathan & Kulkarni) 384
Isolation of soil mycobacteria from acidic forest soil samples (Iivanainen) 663
Lactobacilli enzymes and potential link with infective endocarditis (Oakey, Harty & Knox) 142
Linear alkylbenzenesulphonate degradation by mixed methane-utilizing culture (Hrsak & Grbic-Galic) 487
Lipolysis of milk triglycerides (McKay, Dieckelmann & Beacham) 216
Locating *Brochothrix thermosphacta in situ* in fresh sausage (Stringer, Chaffey, Dodd, Morgan & Waites) 335
Locating nisin-producing *Lactococcus lactis in situ* (Stringer, Dodd, Morgan & Waites) 341
Malassezia pachydermatis isolates from healthy dogs (Bond & Anthony) 537
Microbial degradation of grass fructan and inulin (Muller & Steller) 229
Micrococcaceae associated with lamb spoilage (Prieto, Garcia-Armesto, Gonzalez, Otero & Garcia Lopez) 251
Mixed culture of *Lact. hilgardii* and *Leuc. oenos* from wine (Rodriquez & Manca de Nadra) 521
Mode of action of cationic biocides (Kanazawa, Ikeda & Endo) 55
Modelling *Clostridium* spore germination kinetics (Mafart) 477
Monoclonal antibodies against *Erw. carotovora* subsp. *atroseptica* (Hyman, Wallace, Lopez, Cambra, Gorris & Perombelon) 437
Mycoplasma identification by arbitrarily-primed PCR (Rawadi, Lemercier & Roulland-Dussoix) 586
Nisin production in a synthetic medium (De Vuyst) 29
Nisin$^+$ *Lactococcus lactis* meat isolates (Rodriguez, Cintas, Casaus, Horn, Dodd, Hernandez & Gasson) 109
Nitrogen source and salt tolerance in *Anabaena doliolum* (Rai & Abraham) 501
Novobiocin resistance genes in *Streptomyces niveus* (Hoggarth & Ritchie) 543
Oil-degrading bacteria associated with cyanobacteria in oil-polluted soil (Sorkhoh, Al-Hasan, Khanafer & Radwan) 194
Pathogenic activities of *Aeromonas* isolated from eels (Esteve, Amaro, Garay, Santos & Toranzo) 555
Pediocin A in caecal fermentations (Piva, Meola & Panciroli) 616
Pediocin N5p production in grape juice medium (Strasser de Saad, Pasteris & Manca de Nadra) 473
Peptide and amino acid utilization (Ling & Armstead) 116
Photosensitization of plaque bacteria (Wilson, Burns, Pratten & Pearson) 569
Plasmid transfer in rumen contents (Scott & Flint) 189
Production of lactocin 705 by *Lact. casei* CRL 705 (Vignolo, de Kairuz, de Ruiz Holgado & Oliver) 5
Production of poly-β-hydroxybutyrate by *Azotobacter chroococcum* H23 (Martinez-Toledo, Gonzalez-Lopez, Rodelas, Pozo & Salmeron) 413
Propionic acid bacterial inoculant applied at ensiling (Weinberg, Ashbell, Bolsen, Pahlow, Hen & Azrieli) 430
Pyrolysis mass spectrometry studies of *Carnobacterium* (Manchester, Toole & Goodacre) 88
Recovery and heat resistance of *Bacillus cereus* (Gonzalez, Lopez, Mazas, Gonzalez & Bernardo) 548
Recovery of heat-injured *Listeria monocytogenes* (Patel & Beuchat) 366
Resistance of wine spoilage yeasts to ethanol and acids (Kalathenos, Sutherland & Roberts) 245
Ribotyping of *Capnocytophaga* (Wilson, Wade & Weightman) 394
16S rRNA-based oligonucleotide probes for identification of *Salmonella* (Lin & Tsen) 507
Screening of xylanolytic bacteria using a colour plate method (Breccia, Castro, Baigori & Sineriz) 469
Selective media for isolation of clostridia from faecal specimens (Fujisawa, Namba, Hirayama, Lee & Mitsuoka) 481
Separating micro-organisms from suspensions using ultrasound (Miles, Morley, Hudson & Mackey) 47
Separation bacteria antibody fragments (Molloy, Brydon, Porton & Harris) 359
Spray drying of *Lactobacillus bulgaricus* (Teixeira, Castro & Kirby) 456
Step changes in sucrose concentration and effect on *Salm. typhimurium* growth (Brocklehurst, Mitchell, Pleass & Smith) 495
Strain heterogeneity of *Lact. plantarum* in silage (Duffner & O'Connell) 20
Susceptibility of lager beer to spoilage by lactic acid bacteria (Fernandez & Simpson) 419
Taxonomic study of fluorescent *Pseudomonas* isolated from natural mineral water (Elomari, Coroler, Izard & Leclerc) 71
Taxonomy of meat lactobacilli (Samelis, Tsakalidou, Metaxopoulos & Kalantzopoulos) 157
Thermal inactivation of endospores in oils (Ababouch, Grimit, Eddafry & Busta) 669
Vibrio anguillarum growth kinetics (Guerin-Faublee, Rosso, Vigneulle & Flandrois) 621
Vibrios in β-D-galactosidase assays (Davies, Apte & Peterson) 387
Virulence factors of *Aeromonas* spp. (Pin, Marin, Selgas, Garcia, Tormo & Casas) 175